

Sunday, November 16

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| 13:00 – 17:00 | CHECK-IN |
| 17:00 – 19:20 | Special Session Honoring Darleane Hoffman Co-Chair: H. Nakahara, Univ. Tokyo, Japan Co-Chair: K.E. Gregorich, LBNL, USA |
| 17:00 – 17:20 | OPENING REMARKS |
| 17:20 – 17:40 | G.R. Choppin, Florida State Univ., USA: Darleane Hoffman's Early Career |
| 17:40 – 18:00 | R.J. Silva, LLNL, USA: Darleane Hoffman: Achievements in environmental actinide science |
| 18:00 – 18:20 | C. Hartmann-Siantar, LLNL, USA: Darleane Hoffman's role in establishing and managing the Seaborg Institutes |
| 18:20 – 18:40 | G. Herrmann, Univ. Mainz, Germany: Darleane Hoffman and the revival of transactinide chemistry |
| 18:40 – 19:00 | K.W. Thomas, LANL, USA: Darleane Hoffman's career from the perspective of a woman scientist |
| 19:00 – 19:20 | D.C. Hoffman, LBNL, USA: The final word |
| 19:30 – 21:30 | WELCOME RECEPTION |

Monday, November 17

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| 8:10 – 8:15 | OPENING REMARKS |
| 8:15 – 12:00 | Session 1: Nuclear Structure Theory and Experiment Chair: W. Nazarewicz, Univ. Tennessee, USA |
| 8:15 – 9:00 NS P | P.H. Heenen, Univ. Bruxelles, Belgium: The structure of superheavy nuclei |
| 9:00 – 9:25 NS 1 | I. Ahmad, ANL, USA: Structure of nuclei in the mass 250 region |
| 9:25 – 9:50 NS 2 | F.P. Hessberger, GSI, Germany: Nuclear structure investigations of heavy actinide and trans-actinide isotopes |
| 9:50 – 10:15 NS 3 | R. Julin, Univ. Jyväskylä, Finland: Spectroscopy of the heaviest elements |
| 10:15 – 10:45 | BREAK |
| 10:45 – 11:10 NS 4 | R. Smolanczuk, Soltan Institute for Nuclear Studies, Poland: Properties of superheavy nuclei |

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| 11:10 – 11:35 | NS 5 | W. Greiner, Univ. Frankfurt, Germany: Structure of superheavy elements with meson field theory |
| 11:35 – 12:00 | NS 6 | T.L. Khoo, ANL, USA: Limits of stability, formation mechanism and structure of shell-stabilized heavy nuclei |
| 12:15 – 13:30 | | LUNCH |
| 13:30 – 17:15 | | <u>Session 2: Nuclear Reaction Theory</u> Chair: W.D. Loveland, Oregon State Univ., USA |
| 13:30 – 14:15 | NT P | Y. Abe, Univ. Kyoto, Japan: Theoretical predictions of residue cross-sections for the superheavy elements |
| 14:15 – 14:40 | NT 1 | W.J. Swiatecki, LBNL, USA: The physics of nucleus-nucleus fusion |
| 14:40 – 15:05 | NT 2 | A. Heinz, Yale Univ., USA: Production of spherical superheavy nuclei |
| 15:05 – 15:35 | | BREAK |
| 15:35 – 16:00 | NT 4 | V.I. Zagrebaev, JINR, Russia: Fusion-fission dynamics and perspectives of superheavy element formation |
| 16:00 – 16:25 | NT A | T.Wada, Konan University, Japan: Four-dimensional dynamical approach to the multi-modal fission |
| 18:00 – 20:00 | | POSTER SESSION A |

Tuesday, November 18

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| 8:15 – 12:00 | | <u>Session 3: Chemical Experiments</u> Chair: M. Schädel, GSI, Germany |
| 8:15 – 9:00 | CE P | A. Türler, TU Munich, Germany: Current status and future of transactinide heavy element chemistry |
| 9:00 – 9:25 | CE 1 | R. Eichler, PSI, Switzerland: Gas phase chemistry of bohrium (element 107) |
| 9:25 – 9:50 | CE 2 | Ch.E. Düllmann, LBNL, USA: Chemical investigations of element 108, hassium (Hs) |
| 9:50 – 10:15 | CE 3 | A. Yakushev, TU Munich, Germany: Chemical properties of element 112 |
| 10:15 – 10:45 | | BREAK |
| 10:45 – 11:10 | CE 4 | K. Tsukada, JAERI, Japan: Anion-exchange behavior of rutherfordium and dubnium in pure HF solution |
| 11:10 – 11:35 | CE 5 | J.P. Omtvedt, Univ. Oslo, Norway: Current status of transactinide research with the liquid-liquid extraction system SISAK |

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| 11:35 – 12:00 | CE 6 | H. Haba, RIKEN, Japan: X-ray absorption fine structure spectroscopy of Zr and Hf in HCl solution for chemical characterization of Rf |
| 12:15 – 13:30 | | LUNCH |
| 14:00 – 22:00 | | EXCURSION AND CONFERENCE DINNER |

Wednesday, November 19

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| 8:15 – 12:00 | | Session 4: Nuclear Reaction Experiments Chair: D.C. Hoffman, LBNL, USA |
| 8:15 – 9:00 | NE P | Y.T. Oganessian, JINR, Russia: The current status and future of transactinide heavy element production |
| 9:00 – 9:25 | NE 1 | D. Ackermann, GSI, Germany: Reaction studies and the synthesis of superheavy elements at GSI |
| 9:25 – 9:50 | NE 2 | K. Morita, RIKEN, Japan: Status and future of transactinide reaction experiments at RIKEN |
| 9:50 – 10:15 | NE 3 | W.D. Loveland, Oregon State Univ., USA: Sub-barrier fusion in the $^{48}\text{Ca} + ^{208}\text{Pb}$ reaction |
| 10:15 – 10:45 | | BREAK |
| 10:45 – 11:10 | NE 4 | J. Péter, FULIS, France: Production and study of super-heavy nuclei at GANIL |
| 11:10 – 11:35 | NE 5 | D.J. Morrissey, Michigan State University, USA: Status and future of the RIA project |
| 11:35 – 12:00 | NE 6 | J.A. Nolen, ANL, USA: The RIA project and heavy element physics |
| 12:15 – 13:30 | | LUNCH |
| 13:30 – 17:15 | | Session 5: Chemical Theory Co-Chair: V. Pershina, GSI, Germany Co-Chair: B. Fricke, Univ. Kassel, Germany |
| 13:30 – 14:15 | CT P | V. Pershina, GSI, Germany: Progress in heavy-element research: results from relativistic quantum theory |
| 14:15 – 14:40 | CT 1 | B. Fricke, Univ. Kassel, Germany: Improved density functional calculations for molecules and calculations of adsorption of the heaviest element on surfaces |
| 14:40 – 15:05 | CT 2 | P. Schwerdtfeger, Univ. of Auckland, New Zealand: Electronic properties for the superheavy elements 111 to 119 from relativistic ab-initio calculations |
| 15:05 – 15:35 | | BREAK |

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| 15:35 – 16:00 | CT 3 | U. Kaldor, Tel Aviv University, Israel: High-accuracy calculations for heavy and superheavy elements |
| 16:00 – 16:25 | CT 4 | C.S. Nash, Univ. of New England, USA: Spin-orbit coupling in transactinide chemistry: secondary periodicity and effects in high-symmetry ligand fields |
| 16:25 – 16:50 | CT 5 | P. Pyykkö, University of Helsinki, Finland: Valence-shell QED effects in heavy-element compounds |
| 16:50 – 17:15 | CT 6 | K. Balasubramanian, UC Davis, USA: Electronic structure of molecules containing very heavy & superheavy elements |
| 18:00 – 20:00 | | POSTER SESSION B |

Thursday, November 20

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| 8:15 – 12:00 | | Session 6: Methods and Future Developments Chair: Y. Nagame, JAERI, Japan |
| 8:15 – 9:00 | MD P | H.W. Gäggeler, PSI & Univ. Berne, Switzerland: Physical and chemical techniques to investigate the heaviest elements - Presence and future |
| 9:00 – 9:25 | MD 1 | D. Leitner, LBNL, USA: Ion source developments for heavy element research |
| 9:25 – 9:50 | MD 2 | K.E. Gregorich, LBNL, USA: Recoil separator capabilities for heavy element research and an opportunity for second generation chemistry studies |
| 9:50 – 10:15 | MD 3 | H. Backe, Univ. Mainz, Germany: Heavy element research with traps and laser spectroscopy |
| 10:15 – 10:45 | | BREAK |
| 10:45 – 11:10 | MD 4 | J.V. Kratz, Univ. Mainz, Germany: Status and future developments of the aqueous eavy element chemistry |
| 11:10 – 11:35 | MD 5 | S.N. Dmitirev, JINR, Russia: The status and future of heavy element research at Dubna |
| 11:35 – 12:00 | MD 6 | Z. Qin, PSI, Switzerland: Development of an on-line hot catcher for volatile species |
| 12:00 – 12:30 | | M.A. Stoyer, LLNL, USA: Transactinide element physics: Highlights & Perspectives |
| 12:30 – 13:00 | | N. Trautmann, Univ. Mainz, Germany: Transactinide element chemistry: Highlights & Perspectives |
| 13:00 – 13:15 | | CLOSING REMARKS |